

July 2024
F1002 A-B
NHTSA #24V-392 (School Bus)
NHTSA #24V-393 (Non-School Bus)
Transport Canada #2024-310 (Non-School Bus)
Transport Canada #2024-311 (School Bus)

Subject: Hub Snap Ring and Retainer Tabs

Models Affected: Specific model year 2025 Freightliner 108SD, 114SD, and Business Class M2; Freightliner Custom Chassis MC, MT45, MT45G, MT55, and MT55G Chassis, S2C 106, and S2RV 106 Cab & Chassis, XBS, XCM, XCP, XCR, and XCS Chassis; Thomas Built Buses SAF-T-LINER C2, and SAF-T-LINER EFX; Western Star 47X, 49X, and 57X vehicles manufactured February 2, 2024, through May 2, 2024.

General Information

Daimler Truck North America LLC (DTNA), on behalf of Freightliner Trucks Division, and its wholly owned subsidiaries, Freightliner Custom Chassis Corporation, Western Star Truck Sales, Inc., and Thomas Built Buses, has decided that a defect that relates to motor vehicle safety exists on the vehicles mentioned above.

The affected vehicles may be missing the snap ring on the preset hubs and/or have unbent retainer tabs on the conventional 4-piece fastener hubs. This could allow the wheel hub fasteners to loosen. Wheel separation may occur resulting in an increased risk of loss of vehicle control and a crash.

A Daimler Truck North America authorized service facility will inspect the hub nut retaining system. If there is a failure of the hub nut retaining system we will remove the wheel end, inspect the axle, and wheel end components for damage. Then they will replace any failed parts as needed.

There are approximately 412 vehicles involved in this campaign.

Additional Repairs

In addition to this recall, check OWL for any other open campaigns. Dealers must complete all outstanding recall and field service campaigns prior to the sale or delivery of a vehicle. A dealer will be liable for any progressive damage that results from its failure to complete campaigns before sale or delivery of a vehicle.

Owners may be liable for any progressive damage that results from failure to complete campaigns within a reasonable time after receiving notification.

Work Instructions

Please refer to the attached work instructions. Prior to performing the campaign, check the vehicle for a completion sticker (Form WAR260).

Replacement Parts

No parts required, inspection only.

If our records show your dealership has ordered any vehicle(s) involved in campaign number F1002, a list of the customers and vehicle identification numbers will be available on the DTNA Portal via OWL.

Table 1 - Replacement Parts for F1002

Campaign Number	Part Number	Part Description	Qty.
F1002 A-B	WAR260	BLANK COMPLETION STICKER	1 ea

Table 1

Removed Parts

U.S. and Canadian Dealers, please follow Warranty Failed Parts Tracking shipping instructions for the disposition of all removed parts. Export distributors, please destroy removed parts unless otherwise advised.

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Labor Allowance

Table 2 - Labor Allowance

Campaign Number	Procedure	Time Allowed (hours)	SRT Code	Corrective Action
F1002 A-B	SNAP RING ONLY, INSPECT	0.5	996-R236A	06-Inspect
	SNAP RING & HUB, INSPECT	1.8	996-R236B	06-Inspect

Table 2

IMPORTANT - Before Beginning Work:

- Check OWL to ensure the vehicle is involved and the campaign has not previously been completed.
- Check the vehicle for a completion sticker.

IMPORTANT - After Repair is Complete:

- Attach a red completion sticker (Form WAR260) to the base completion label (Form WAR259). If the vehicle does not already have a base completion label, clean a spot on the appropriate location of the vehicle, and attach a base completion label, prior to installing the completion sticker.
- Failure to install a recall completion sticker may result in a chargeback of the recall claim.

Claims for Credit

You will be reimbursed for your parts, labor, and handling (landed cost for Export Distributors) by submitting a claim. Please reference the following information in OWL:

- All claims must be submitted within 30 days of the repair date.
- Claim type is **Recall Campaign**.
- In the Campaign field, enter the campaign number and appropriate population/group code (**F1002-A or F1002-B**).
- In the Primary Failed Part Number field, enter **25-F1002-000**.
- In the Parts section, enter the appropriate kit and/or part number(s).
- In the Labor field, enter the appropriate SRT from the Labor Allowance table. Administrative time will be included automatically as SRT 939-6010A 0.3 hours.
- The VMRS Component Code is **F99-999-005** and the Cause Code is **A1 - Campaign**.
- **U.S. and Canada -- Reimbursement for Prior Repairs.** When a customer asks about reimbursement, please do the following:
 - Accept documentation of the previous repair.
 - Make a brief check of the customer’s paperwork to see if the repair may be eligible for reimbursement. (See the "Copy of Owner Letter" section of this bulletin for reimbursement guidelines.)
 - Attach the documentation to a pre-approval recall claim, and submit the pre-approval claim for a decision.
 - If approved, submit a based-on payment claim (based on the pre-approval.)
 - After the claim has been paid, reimburse the customer.

Excess Inventory: U.S. and Canadian dealers, excess inventory related to this campaign, in resalable condition, may be returned to the appropriate PDC. U.S. dealers, submit a Parts Authorization Return (PAR) to the Memphis PDC. Canadian dealers, submit a PAR to your facing PDC. PAR requests must include the original purchase invoice number. Export Distributors, excess inventory is not returnable.

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For Support: Contact the Warranty Campaigns Department via the Warranty Support Center (WSC) located on the DTNA Portal, or contact the Customer Assistance Center at (800) 385-4357. Export distributors, submit a WSC ticket or contact your International Service Manager.

The letter notifying U.S. and Canadian vehicle owners is included for reference.

Please note that the National Traffic and Motor Vehicle Safety Act, as amended (Title 49, United States Code, Chapter 301), requires the owner's vehicle(s) be corrected within a reasonable time after parts are available to you. The Act states that failure to repair a vehicle within 60 days after tender for repair shall be prima facie evidence of an unreasonable time. However, circumstances of a particular situation may reduce the 60 day period. Failure to repair a vehicle within a reasonable time can result in either the obligation to (a) replace the vehicle with an identical or reasonably equivalent vehicle, without charge, or (b) refund the purchase price in full, less a reasonable allowance for depreciation. The Act further prohibits dealers from selling a vehicle unless all outstanding recalls are performed. Any lessor is required to send a copy of the recall notification to the lessee within 10 days. Any subsequent stage manufacturer is required to forward this notice to its distributors and retail outlets within five working days.

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Copy of Notice to Owners

Subject: Hub Snap Ring and Retainer Tabs

For the Notice to U.S. Customers: This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act. **For the Notice to Canadian Customers:** This notice is sent to you in accordance with the requirements of the Motor Vehicle Safety Act. This is to inform you that your vehicle may contain a defect that could affect the safety of a person.

Daimler Truck North America LLC (DTNA), on behalf of Freightliner Trucks Division, and its wholly owned subsidiaries, Freightliner Custom Chassis Corporation, Western Star Truck Sales, Inc., and Thomas Built Buses, has decided that a defect, which relates to motor vehicle safety, exists in certain 2025 Freightliner 108SD, 114SD, and Business Class M2; Freightliner Custom Chassis MC, MT45, MT45G, MT55, and MT55G Chassis, S2C 106, and S2RV 106 Cab & Chassis, XBS, XCM, XCP, XCR, and XCS Chassis; Thomas Built Buses SAF-T-LINER C2, and SAF-T-LINER EFX; Western Star 47X, 49X, and 57X vehicles manufactured February 2, 2024, through May 2, 2024.

The affected vehicles may be missing the snap ring on the preset hubs and/or have unbent retainer tabs on the conventional 4-piece fastener hubs. This could allow the wheel hub fasteners to loosen. Wheel separation may occur resulting in an increased risk of loss of vehicle control and a crash.

A Daimler Truck North America authorized service facility will inspect the hub nut retaining system. If there is a failure of the hub nut retaining system we will remove the wheel end, inspect the axle, and wheel end components for damage. Then they will replace any failed parts as needed. The Recall will take approximately thirty minutes to two hours and will be performed free of charge.

Please contact an authorized Daimler Truck North America dealer to arrange to have the Recall performed and to ensure that parts are available at the dealership. To locate an authorized dealer, search online at <https://northamerica.daimlertruck.com/contact-us>. Scroll down to "Locate a Dealer" and select the appropriate brand. You may also confirm your vehicle's involvement in this recall at the following URL: <https://dtna-dlinfo.prd.freightliner.com:48518/VinLookup/vin-module/getVinLookupPage>.

You may be liable for any progressive damage that results from your failure to complete this recall repair within a reasonable time after receiving notification.

If you do not own the vehicle that corresponds to the identification number(s) which appears on the recall notification, please return the notification to the Warranty Campaigns Department in the postage-paid envelope with any information you can furnish that will assist us in locating the present owner. If you have leased this vehicle, federal law requires that you forward this notice to the lessee within 10 days. If you are a subsequent stage manufacturer, federal law requires that you forward this notice to your distributors and retail outlets within five working days. If you have paid to have this recall condition corrected prior to this notice, you may be eligible to receive reimbursement. Please see the reverse side of this notice for details.

If you have questions about this recall, please contact the Warranty Campaigns Department at (800) 547-0712, 7 a.m. to 4 p.m. Pacific Time, Monday through Friday, e-mail: dtna.warranty.campaigns@daimlertruck.com. **For the Notice to U.S. Customers:** If you are not able to have the defect remedied without charge and within a reasonable time, you may wish to submit a complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE., Washington, DC 20590; or call the Vehicle Safety Hotline at (888) 327-4236 (TTY: 800-424-9153); or go to www.nhtsa.gov. **For the Notice to Canadian Customers:** If you wish to submit a complaint about this recall, you can contact Transport Canada road safety, 80 rue Noel, Gatineau, Quebec J8Z 0A1 or call (800) 333-0510.

We regret any inconvenience this action may cause, but feel certain you understand our interest in motor vehicle safety.

WARRANTY CAMPAIGNS DEPARTMENT

Enclosure

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Reimbursement to Customers for Repairs Performed Prior to Recall

If you have already **paid** to have this recall condition corrected you may be eligible to receive reimbursement.

Requests for reimbursement may include parts and labor. Reimbursement may be limited to the amount the repair would have cost if completed by an authorized Daimler Truck North America dealer. The following documentation must be presented to your dealer for consideration for reimbursement.

Please provide original or clear copies of all receipts, invoices, and repair orders that show:

- The name and address of the person who paid for the repair
- The Vehicle Identification Number (VIN) of the vehicle that was repaired
- What problem occurred, what repair was done, when the repair was done
- Who repaired the vehicle
- The total cost of the repair expense that is being claimed
- Proof of payment for the repair (such as the front and back of a cancelled check or a credit card receipt)

Reimbursement will be made by check from your Daimler Truck North America dealer.

Please speak with your Daimler Truck North America authorized dealer concerning this matter.

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Work Instructions

Subject: Hub Snap Ring and Retainer Tabs

Models Affected: Specific model year 2025 Freightliner 108SD, 114SD, and Business Class M2; Freightliner Custom Chassis MC, MT45, MT45G, MT55, and MT55G Chassis, S2C 106, and S2RV 106 Cab & Chassis, XBS, XCM, XCP, XCR, and XCS Chassis; Thomas Built Buses SAF-T-LINER C2, and SAF-T-LINER EFX; Western Star 47X, 49X, and 57X vehicles manufactured February 2, 2024, through May 2, 2024.

Inspection of the Four-Piece Nut Hub

Note: (Inspection of the PreSet Plus Hub begins on page 9)

1. Check the base label (Form WAR259) for a completion sticker for F1002 (Form WAR260), indicating this work has been done. The base label is usually located on the passenger-side door, about 12 inches (30 cm) below the door latch. If a completion sticker is present, no work is needed. If a completion sticker is not present, go to the next step.
2. Park the vehicle on a level surface, shut down the engine, and set the parking brake. Chock the tires.
3. Remove the drive axle stud nuts and washers. See [Fig. 1](#).

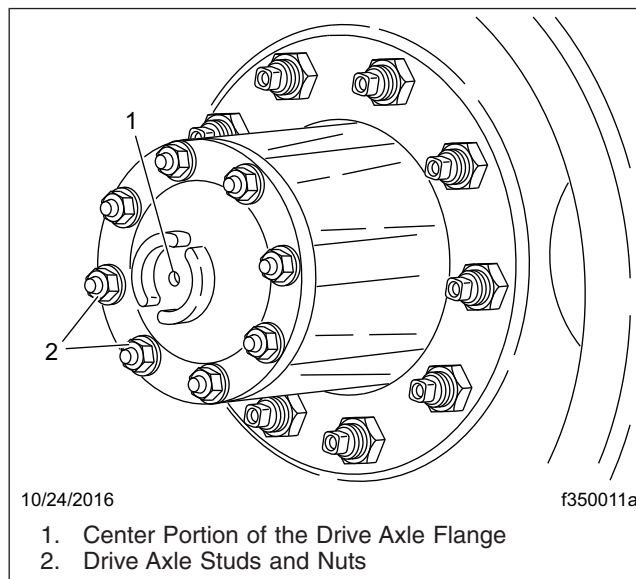


Fig. 1, Wheel Assembly and Hub

NOTICE

When tapping the drive axle flange, avoid striking the drive axle studs. If struck, the studs may bend or break, or the stud threads can be damaged. Replace the damaged studs.

4. Use a hammer and a soft drift, such as a brass one, to sharply tap the center portion of the drive axle flange. Once the seal is broken, the shaft typically springs slightly outward.

NOTE: Even if the drive axle shaft does not spring outward, the seal may have loosened enough to pull the shaft from the axle housing. If the seal has not broken, repeat the previous step.

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5. If so equipped, remove the tapered dowels and washers from the drive axle flange.
6. Remove the drive axle shaft.
7. Remove and discard the gasket.
8. Inspect the retainer tab to make sure that the tab is fully bent over on the nut. See [Fig. 2](#) and [Fig. 3](#).

Is the retainer tab correctly installed on the nut?

YES → Proceed to the next step.

NO → Go to the **Inspection and Replacement of the Hub** procedure (on page 11).

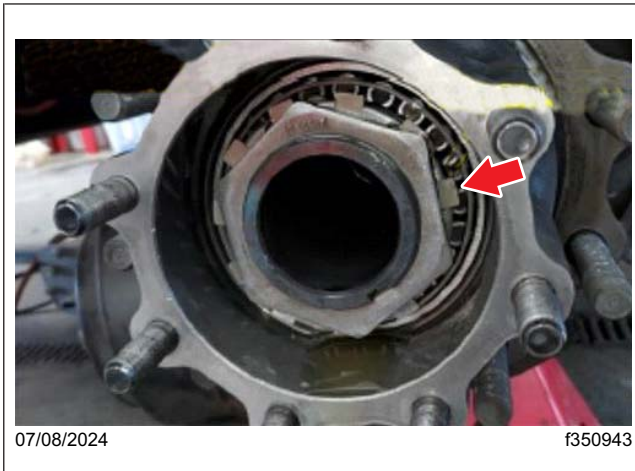


Fig. 2, Incorrect – Lock Tab Not Bent



Fig. 3, Correct – Lock Tab Bent Over

9. Replace the axle gasket or the O-ring.
10. Install the axle shaft and tighten the fasteners 130 to 140 lbf-ft (176 to 190 N·m).

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11. Clean the area surrounding the oil fill port plug, then remove the plug and O-ring. See [Fig. 4](#).

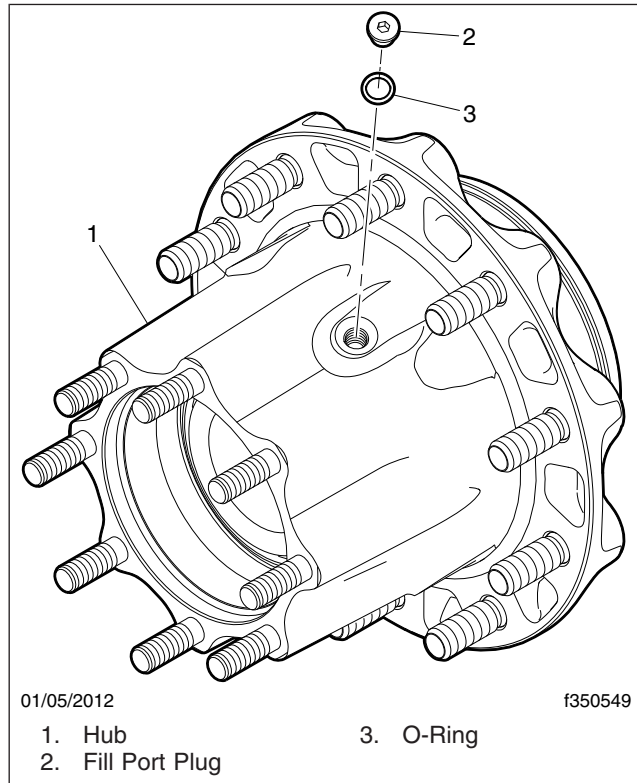


Fig. 4, Hub with Oil Fill Port

NOTE: The fill port plug is magnetic. On drive axles, it is normal to find a small amount of very fine metallic particles from the carrier housing on the magnetic fill plug. Whenever the plug is detached for inspection, it is necessary to remove these particles from the magnet.

12. Use a clean funnel to add 1 quart (0.95 liter) of the recommended drive axle lubricant through the oil fill port. For recommended lubricants, see the applicable maintenance manual.
13. Install the fill port plug and tighten 20 to 25 lbf-ft (27 to 34 N·m).
14. Clean a spot on the base label (Form WAR259) and attach a campaign completion sticker for F1002 (Form WAR260), indicating this work has been completed.

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Inspection of the PreSet Plus Hub

1. Check the base label (Form WAR259) for a completion sticker for F1002 (Form WAR260), indicating this work has been done. The base label is usually located on the passenger-side door, about 12 inches (30 cm) below the door latch. If a completion sticker is present, no work is needed. If a completion sticker is not present, proceed to the next step.
2. Park the vehicle on a level surface, shut down the engine, and set the parking brake. Chock the tires.
3. Remove the drive axle stud nuts and washers. See [Fig. 5](#).

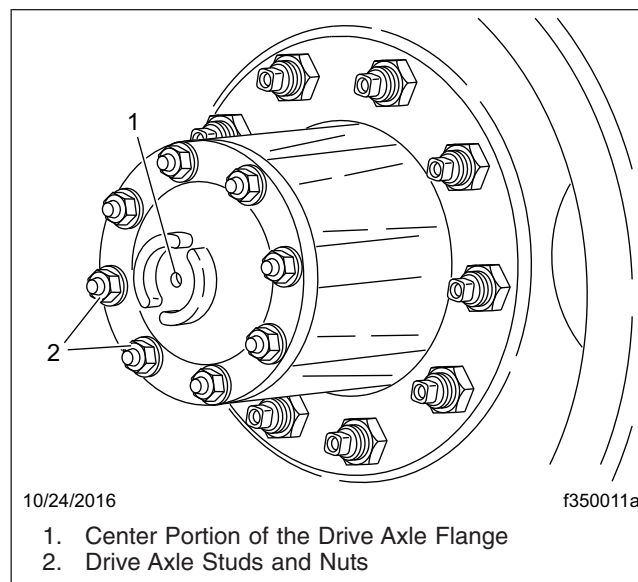


Fig. 5, Wheel Assembly and Hub

NOTICE

When tapping the drive axle flange, avoid striking the drive axle studs. If struck, the studs may bend or break, or the stud threads can be damaged. Replace the damaged studs.

4. Use a hammer and a soft drift, such as a brass one, to sharply tap the center portion of the drive axle flange. Once the seal is broken, the shaft typically springs slightly outward.

NOTE: Even if the drive axle shaft does not spring outward, the seal may have loosened enough to pull the shaft from the axle housing. If the seal has not broken, repeat the previous step.

5. If so equipped, remove the tapered dowels and washers from the drive axle flange.
6. Remove the drive axle shaft.
7. Remove and discard the gasket.

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8. Inspect the locking snap ring to ensure the tab is fully inserted in the locking slots in the integrated spindle nut. **Figure 6** and **Fig. 7** shows an incorrectly installed and missing locking snap ring. **Figure 8** and **Fig. 9** shows correctly installed locking snap rings.

Is the snap ring correctly installed?

YES → Proceed to the next step.

NO → Go to **Inspection and Replacement of the Hub** procedure (on page 11).

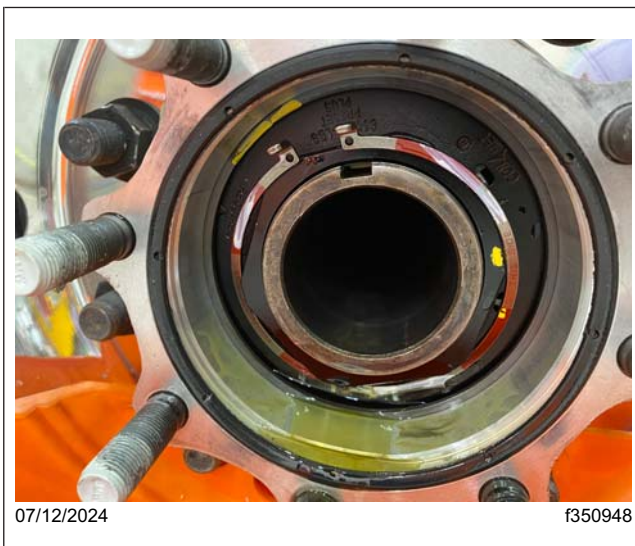


Fig. 6, Incorrectly Installed Locking Snap Ring

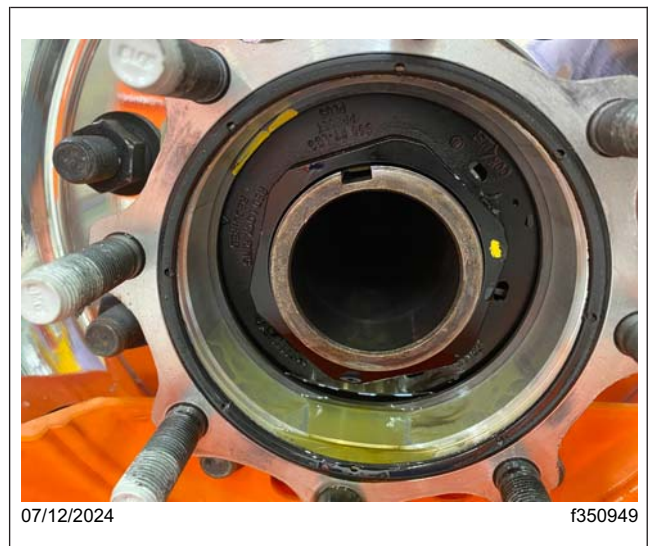


Fig. 7, Missing Locking Snap Ring

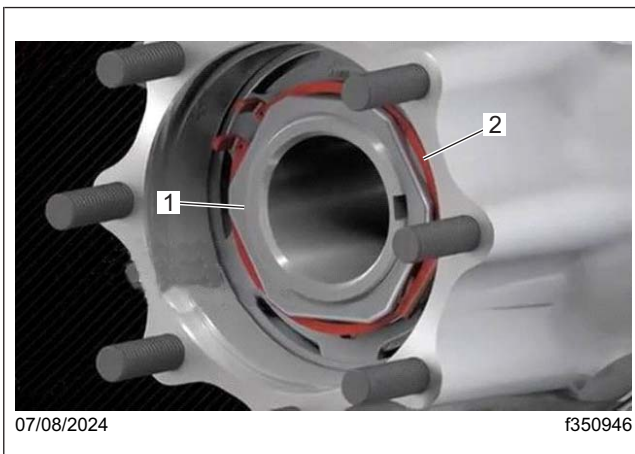


Fig. 8, Correctly Installed Locking Snap Ring



Fig. 9, Correctly Installed Locking Snap Ring

9. Replace the axle gasket or O-ring.
10. Install the axle shaft and tighten the fasteners 130 to 140 lbf-ft (176 to 190 N·m).

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11. Clean the area surrounding the oil fill port plug, then remove the plug and O-ring. See **Fig. 10**.

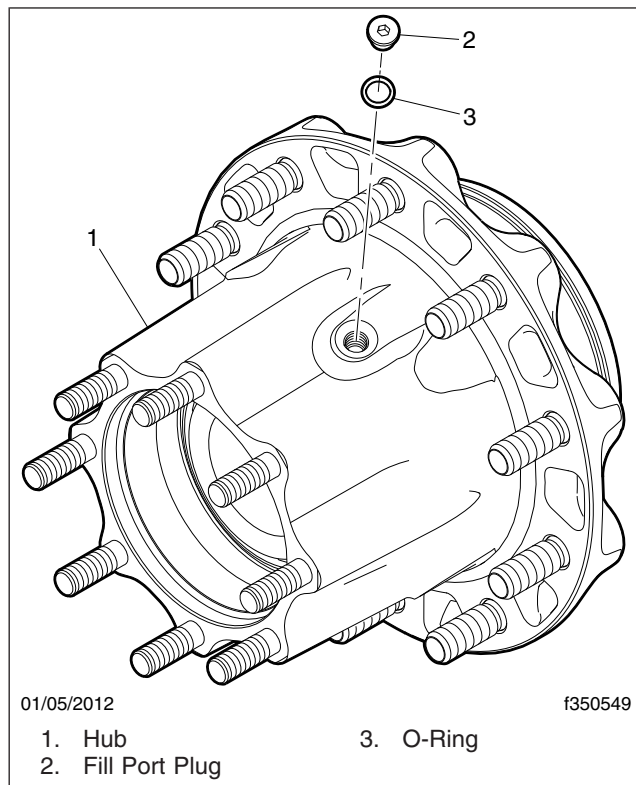


Fig. 10, Hub with Oil Fill Port

NOTE: The fill port plug is magnetic. On drive axles, it is normal to find a small amount of very fine metallic particles from the carrier housing on the magnetic fill plug. Whenever the plug is detached for inspection, it is necessary to remove these particles from the magnet.

12. Use a clean funnel to add 1 quart (0.95 liter) of the recommended drive axle lubricant through the oil fill port. For recommended lubricants, see the of the applicable maintenance manual.
13. Install the fill port plug and tighten 20 to 25 lbf-ft (27 to 34 N-m).
14. Clean a spot on the base label (Form WAR259) and attach a campaign completion sticker for F1002 (Form WAR260), indicating this work has been completed.

Inspection and Replacement of the Hub

1. Remove the hub and inspect all the components for wear.
2. If any component is worn, replace the hub. For instructions, see **Group 35** of the applicable workshop manual.
3. Clean a spot on the base label (Form WAR259) and attach a campaign completion sticker for F1002 (Form WAR260), indicating this work has been completed.